

UC-NRLF



B 4 031 767



Digitized by the Internet Archive
in 2007 with funding from
Microsoft Corporation

Slacks

EXCHANGE
JAN 22

UNIVERSITY OF ILLINOIS BULLETIN

ISSUED WEEKLY

Vol. XX

NOVEMBER 27, 1922

No. 13

[Entered as second-class matter December 11, 1912, at the post office at Urbana, Illinois, under the Act of August 24, 1912. Accepted for mailing at the special rate of postage provided for in section 1103, Act of October 3, 1917, authorized July 31, 1918.]

EDUCATIONAL RESEARCH CIRCULAR NO. 14

BUREAU OF EDUCATIONAL RESEARCH
COLLEGE OF EDUCATION

GIFTED CHILDREN AND PROVISIONS FOR THEM IN OUR SCHOOLS

By

RUTH STREITZ

Associate, Bureau of Educational Research



PUBLISHED BY THE UNIVERSITY OF ILLINOIS
URBANA



Gifted Children and Provisions For Them in Our Schools

It is obvious to all teachers that children differ widely in their capacity to do the work of the school. At one extreme we find a few mentally defective children (about 1 out of every 200) and a larger number who are dull or stupid. At the other extreme we find the bright and the gifted children. Neither of these types fits into the regular organization and instruction of the school which is planned for "average children." It is generally agreed that before a school can attain the highest levels of efficiency some special provision must be made for the dull and backward pupils and for the bright and gifted.

In many schools we find special classes or other provisions for children on the lower levels of intelligence but it is seldom that corresponding provisions are made for bright children. The reasons for this practice are obvious. The bright child usually does the work of the school satisfactorily and in most cases does not create any disciplinary problems. Therefore, he does not force himself upon the school as a problem. However, the bright child has just as much a right to receive educational opportunities commensurate with his capacity to learn as the dull and backward child to receive special attention because he does not fit in with the regular work of the school. Moreover, from the standpoint of contributions which they will make to the progress of society, it is more important for the school to provide appropriate educational facilities for the superior children.

School records of certain gifted children. Whipple defines the term "gifted" as meaning "those wholesome, competent children with sound bodies, lively ambitions,—whose future, when properly trained only fulfills the promise of early years." The number of such children varies with different authorities. Woodrow¹ says that 7 percent of our school population may be classed as "very superior" and "near genius" while Whipple² states we may

¹Woodrow, Herbert. *Brightness and Dullness in Children*. Chicago: J. B. Lippincott Company, p. 54.

²Whipple, Guy M. "Some features in the education of gifted children," *School and Society*, 12:175-79, September, 1920.

safely place the number at 10 percent. Before general intelligence tests were available the mental ability of many gifted children was often underestimated, if not ignored. Cases have been reported of pupils who were really brilliant being denied the right of promotion. As a result they frequently lost interest in the work of the school and became retarded because the teacher failed to understand their personality and to appreciate their mental capacities. The following case reported by Woodrow is doubtless typical of a large number.

"Louis R. was nine years and ten months old, when tested, and was found to have a mental age of twelve years and nine months, nearly three years ahead of his chronological age. So high a mental age is very unusual for a nine year old child. It indicated that he had sufficient ability to do work of the fifth or sixth grade. Actually he was in the 'B' class of the fourth grade. Louis R. was not promoted to the 'A' class of the fourth grade because his work in the 'B' class does not show continuous improvement but is erratic. If he would apply himself he could do the work fairly well, but he will do one or two problems in arithmetic and let the rest go. He spends most of his time trying to make aeroplanes, etc. out of paper, or by whittling them from little blocks of wood which he brings to school. He loses interest in all school work after a few minutes. He learned to do long division with only one explanation—did two problems correctly—then quit trying and failed systematically after that."¹

The cause for failure is obvious. There was no point of contact between the boy's active mind and his school work. After he was tested in January it was recommended that he receive a special promotion. He was transferred also to another building. Enquiry was made in May of the same year and the fifth grade teacher said that he had again been promoted on trial to "B" sixth grade, except in arithmetic and that she was giving him special help in this subject out of school hours so that he could enter the "A" sixth grade in the fall without condition.

Teachers are not likely to rate dull pupils as average or superior but they not infrequently rate superior children as average.² An investigation was made in the first grade of one of the New York

¹Woodrow, Herbert. *Brightness and Dullness in Children*. Chicago: J. B. Lippincott Company, p. 35.

²McCall, Wm. A. *How to Measure in Education*. New York: Macmillan Company, 1922, p. 59.

public schools to determine the retarded and the normal or average pupils. A boy, W. H., 9½ years old, was discovered as possessing a mental age two years ahead of his chronological age. He was given the opportunity to advance at a very rapid rate, being promoted as soon as he had acquired the essential features of work in each grade, and without any conscious effort on his part he finished the work of nine grades in two years.¹

Another example of a superior child was observed by the writer. A. J. was able to complete the work of the elementary school in four years owing to the cooperation of home and school. She did not enter school until eight years of age, having received private instruction from her parents in the home. She was examined at this time and her mental age was found to be fourteen. She was placed in the III-A grade upon entrance and remained one month when she was promoted to the fourth grade where she remained all year. She entered the fifth grade at the age of nine and while in this grade was permitted to read the sixth grade books during school hours. She then passed the fifth and sixth grade examinations and entered the seventh grade. In the seventh grade she continued to make excellent records but because of a severe illness with influenza she remained out of school from December until June. The following September she entered the VII-A grade, completed it in the spring and began the work of VIII-B. During the summer she continued her readings, skipped VIII-A, and entered high school at the age of twelve. The two years she has attended high school have been marked with the excellent work which comes from an active mind rightly employed.

Experiments with groups of superior children have been carried on in various parts of the country. Whipple conducted an experiment in one of the public schools of Urbana, Illinois, with 30 children—15 selected from the fifth grade and 15 from the sixth grade, representing the top 20 percent of the enrollment. These children were able to do two years work in one by lessening the amount of drill, decreasing the amount of explanation and by omitting or passing rapidly over subject matter which was already known or of relative unimportance. Whipple concludes that, since the rate of learning in a selected class of gifted children is twice as great as that of the ordinary class, a group of children properly selected in the

¹Specht, Louise F. "A Terman class in public school No. 64, Manhattan," *School and Society*, 9:393-98, March, 1919.

primary grades could pass through the curriculum of the standard eight grades in five or six years with perfect ease; they could enter also the four-year high school at 11½-12½ years of age and take up the work with assurance.¹

Terman reported an experiment carried on in Alameda, California, which included twenty-four pupils selected by systematic search throughout the public schools of Alameda. In order to secure subjects whose intelligence would be far above the average, the study was limited to children whose intelligence quotients were 140 or above. A complete record was kept of these children in regard to psychological and educational tests, school progress, play and recreation, trait ratings, social status, and heredity. Incidentally, it may be noted that Terman concludes on the basis of this investigation that the intellectually superior children are apparently not below the average in general health.² The majority of these children had skipped grades in school and yet their school work was in most cases so superior as to suggest the desirability of additional promotions.

Methods of providing for gifted children. It is a fundamental thesis of public education in a democracy that the schools should provide adequate educational opportunities for all children. Since gifted children possess a much greater capacity to learn than other children of the same age, the educational opportunities provided for average children cannot be called adequate for them. Additional educational opportunities may be created by making provisions for rapid progress through the school system or for an enriched curriculum. Five specific plans are enumerated below.

1. **Rapid progress by skipping grades.** At the regular promotion time or at other times gifted children may be advanced to the next grade. In almost every school system there are a few pupils who have gained one or more years by this plan.

2. **Rapid progress by segregation in fast sections.** According to this plan the gifted children belonging to a school grade are placed in a separate section and permitted to advance as rapidly as they are able to do the regular work of the grade. This plan has

¹Whipple, Guy M. "Some features in the education of gifted children," *School and Society*, 12:175-179, September, 1920.

²Terman, Lewis M. *The Intelligence of School Children*. Chicago: Houghton Mifflin Company, 1919, p. 193.

been adopted in Elizabeth, New Jersey, and in a number of other cities. In some places it is followed in all grades while in others it is found in only the intermediate or grammar grades.

3. Enriched curriculum by means of additional subjects.

According to this plan gifted pupils are taught in the regular classes but are permitted to undertake more than the usual number of school subjects. This plan is found more frequently in the high school and in the upper grades of the elementary school where the teaching has been departmentalized. In the high school gifted children are frequently permitted to carry five subjects while other pupils are restricted to four or three.

4. Enriched curriculum by means of supplementary assignments.

This plan makes provisions for assignments to be adjusted to the capacity of the children. Gifted children are given the most difficult and extensive assignments. However, they are considered members of the regular class. Usually additional credit or other recognition for this supplementary work is not given. However, this feature could easily be added.

The Winnetka Plan is a combination of additional subjects and supplementary assignments. The instruction, however, has been individualized to a large extent. Each pupil is permitted to progress at his own rate. The school has established "goals" which must be reached before the pupil can proceed to the next grade. There are no recitations and no failures; neither are pupils permitted to skip grades.¹

5. Enriched curriculum in segregated classes.

This plan differs from the two just described in that the gifted children are segregated in separate classes. They do not come in contact with other children in the course of their regular school work. They may be permitted to pursue additional subjects or to study the subjects of the regular curriculum in a more intensive manner. Detroit has adopted this method in the seventh and eighth grades. No attempt is made to have the children gain time but they study more intensively English, History, Music, and Art and undertake certain special advanced classes in Algebra and Latin.²

¹Washburn, Carleton W. "Educational measurement as a key to individual instruction," *Journal of Educational Research*, 5:195-206, March, 1922.

²Cleveland, Elizabeth. "Detroit's experiment with gifted children," *School and Society*, 12:179-83, September, 1920.

Combination of the above plans. Two or more of the plans just described may be combined. For example, we may have in segregated classes both rapid progress and an enriched curriculum. A few children may be permitted to skip a grade in almost any of the plans. Furthermore; we find many modifications due to the methods of instruction used or to the particular curriculum followed.

Reasons for providing special opportunities for bright or gifted children. Society has recognized that every child has a right to an education. It is particularly important that every bright child shall have an educational opportunity commensurate with his capacity. The future of our social group depends largely upon those who are more capable than the average. Those of ordinary capacity should be able to maintain the present level of social development but progress is dependent upon the contributions of those possessing more than average ability. Hence it is imperative from the standpoint of the future of organized society to provide adequate training for gifted children. "Whether or not civilization moves on and up depends most on the advances made by creative thinkers, and leaders in science, politics, art, morality, and religion. Moderate ability can follow or imitate but genius must show the way."¹

Bright children should be encouraged to recognize their responsibility toward society. The development of habits and ideals which constitute good citizenship is especially important in the case of gifted children because they must assume a large responsibility for the future of civilization. They are the ones who should be best equipped to serve society but they will fail unless actuated by appropriate ideals. When such children pursue the ordinary curriculum in regular classes success comes so easily that desired attitudes and ideals are often not developed.

"Satan finds work for idle hands to do" may well serve to illustrate what happens to many bright children in the ordinary classes who soon complete the assigned work and are bored with the repetitions necessary for the slow members of the group. As a result they frequently become as much or more of a problem than those possessing lower degrees of mentality. Provision should be made so that the work asked of each child will constitute a real challenge to

¹Terman, Lewis M. *The Measurement of Intelligence*. Chicago: Houghton Mifflin Company, 1916, p. 12.

his capacity. Those of superior ability should be asked to do superior work, both in amount and in quality. Only when the maximum effort is required of each gifted child will those essential qualities of concentration, initiative and resourcefulness be developed.

Since under the present conditions many gifted children are seldom working up to their capacity, it is urged that the total efficiency of the school will be materially increased when we have made adequate provision for such children. Instead of frequently becoming disciplinary problems they will be interested in their work. They will be doing things which they enjoy doing. They will derive satisfaction from work well done, and as a result the total educational output of the school will be materially increased.

In addition to these general arguments for making some special provision for gifted children certain arguments have been advanced for each of the particular plans which have been enumerated. Recently the advantages of segregating gifted children in special classes has been urged. Only in this way, its advocates claim, can freedom be secured in creating the appropriate educational opportunities. In such groups it will be possible for children to progress at the rate which is best for them and to pursue the curriculum which is most appropriate.

Objections to special provisions for gifted children. The objections which have been raised are, for the most part, objections to a particular plan rather than to the fundamental principle of making special provisions for children possessing the highest degrees of mentality. Bagley¹ urges that segregation of pupils has no place in a democracy. He feels that if we segregate pupils on the basis of their capacity to learn we will thereby deprive them of vital educational opportunities which exist in the contacts between pupils of different levels of intelligence in the usual classroom.

Objection has been made also to the use of general intelligence tests for the purpose of determining who are the gifted children. Bagley has expressed the conviction that at present the measures of general intelligence are not sufficiently accurate to be used as a prediction of the future success of children or as a basis for separating them into groups for instructional purposes. He also expresses

¹Bagley, William C. "Educational determinism; or democracy and the I. Q.," Educational Administration and Supervision, 8:257-72, May, 1922, p. 264.

skepticism with reference to the constancy of the I. Q. It should, however, be noted that his opposition is to a particular method rather than to the fundamental principle that society should provide gifted children with educational opportunities commensurate with their capacity to learn.

3 The expense involved is another objection which is raised when it is suggested that special provision should be made for exceptional children. However, no additional expense is involved in giving bright children extra promotions. Neither is there additional expense in enriching the course of study for those remaining in regular classes unless such enrichment calls for additional equipment, which will not usually be the case if the school is at the time properly equipped. The forming of a section of gifted pupils has been accomplished in many school systems without additional expense. In some cases although additional teachers have been employed it is reported that the saving of from one to two years time for these children when they are permitted to make rapid progress more than pays for the additional teacher and the extra school equipment.

4 Rapid progress by means of skipping a grade has been criticised because in many cases the pupils do not have the opportunity to study topics which are considered essential. Investigation has shown that the gaps in a pupil's education which are created by skipping a grade tend to disappear because such children are bright and are quicker to learn than others and consequently pick up incidentally much of what they have missed. Many children who have skipped one or more grades appear to do the work of the advanced grade with ease and in many instances the work has been of superior quality.

5 It is contended that if the bright child is permitted to advance at his own rate, he will enter high school and consequently college too young. He will be socially immature and will have difficulty in making the proper social adjustments. Our common observation reveals that many gifted children have experienced no difficulty in taking their places in groups whose members were chronologically older. McCall suggests that it is the older pupils who are slow to learn and who have difficulty in making social adjustments. They dislike the presence of younger children because they seem to find it an insult to their intelligence.¹

¹McCall, W. A. How to Measure in Education. New York: Macmillan Company, 1922, p. 63.

Conclusions in regard to provisions for gifted children. After considering the various objections and criticisms, it is the writer's judgment that the most hopeful plan for the average school system to adopt is that of making provision for gifted children in the regular classes by an enriched curriculum through extra assignments and, in some cases, by additional school subjects. This plan should, however, be supplemented in some instances by extra promotions. Children who are really bright may be expected to gain from one to two years by the time they have completed the elementary school. Where conditions are favorable, segregation may prove most satisfactory but at the present time experimental evidence is lacking to show that it is the best for all school systems.

Methods of selecting gifted children. Until recently teachers' estimates and school marks have constituted the evidence of the degree of a child's mentality. Teachers' estimates are often inadequate. Frequently the teacher fails to distinguish between capacity to learn and conduct. The teacher's judgment is also influenced by personal characteristics of pupils. Intelligence is frequently underestimated because the teacher fails to take into account chronological age and emotional differences. School marks are likewise unsatisfactory because they lack accuracy.

Standardized achievement tests are more accurate than teachers' estimates or school marks. They are, however, not entirely satisfactory for the purpose of selecting gifted children because they are designed to measure achievement rather than capacity to achieve. They may, however, be very useful in furnishing supplementary information, which will assist a teacher in reaching a decision in a doubtful case.

The group intelligence test is the best single instrument to use in selecting gifted children. However, the measurements yielded by these tests are not absolutely accurate and all further information which is available should be taken into consideration in determining the children who shall be considered "gifted."

The discovery of gifted children. When a general intelligence test is given throughout the school system it usually happens that a few gifted children are discovered. Often pupils who have not been suspected by their teachers of possessing unusual ability are found to be distinctly superior. Whipple reports a girl with an exceptional test record who had been rated by her teacher as "aver-

age." This girl possessed an I. Q. of 130 but owing to extreme timidity had not taken an active and responsive part in the classroom work. After overcoming these difficulties, the pupil made a much better showing in her school work and the teacher then agreed that she could have done more successful work in an advanced grade.¹

Another case which may be cited is that of an eleven-year old boy who was found to have a mental age of fourteen years and one month. The boy was described as being slow in his movements and in speech yet uncommonly correct in reasoning. His practical judgment was good and he appeared self possessed. His teacher, however, declared that his school work was not above the average.

When these gifted children in a school system have been discovered educators more and more should realize that this group does need direction so that their special abilities may be used to the greatest advantage. Interest must be stimulated and idleness prevented. "Each pupil, whatever may be the character and degree of his natural gifts must be given training of such a nature as will give the utmost possible return to the community for his particular intellectual endowment."²

¹Whipple, G. M. *Classes for Gifted Children*. Bloomington: Public School Publishing Company, 1919, p. 96.

²Trabue, M. R. "Some pitfalls in the administrative use of intelligence tests." *Journal of Educational Research*, 6:1-11, June, 1922.

Slacks

UNIVERSITY OF ILLINOIS BULLETIN

ISSUED WEEKLY

Vol. XX

DECEMBER 18, 1922

No. 16

[Entered as second-class matter December 11, 1912, at the post office at Urbana, Illinois, under the Act of August 24, 1912. Acceptance for mailing at the special rate of postage provided for in section 1103, Act of October 3, 1917, authorized July 31, 1918.]

EDUCATIONAL RESEARCH CIRCULAR NO. 15

BUREAU OF EDUCATIONAL RESEARCH
COLLEGE OF EDUCATION

EXCHANGE
22

EDUCATIONAL TESTS FOR USE IN ELEMENTARY SCHOOLS

By

WALTER S. MONROE

Director, Bureau of Educational Research



LIBRARY
OF THE
UNIVERSITY OF
ILLINOIS

PUBLISHED BY THE UNIVERSITY OF ILLINOIS
URBANA

